

**PATENT**



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Ding Jong Wang, Taipei  
5 Kuang Kai Liang, Taipei  
Pin Cheng Chou, Taipei  
Ming Chen Chang, Taipei

Filing Date: 06/19/2001 Art Unit: 2673  
10 Serial No.: 09/681,855 Docket No.: PMXP0107USA

Title: POINTING DEVICE WITH A ROLLABLE DEVICE AND LIGHT  
SOURCE

**RECEIVED**

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To: Assistant Commissioner for Patents  
Washington, D.C. 20231

APR 15 2003

Technology Center 2600

Subject: Information disclosure statement Under  
20 37C.F.R. §1.56.

Dear Sir/Madam:

25 This is an Information Disclosure Statement in accordance  
with the duty to disclose information material to  
patentability under 37 C.F.R. §1.56. Applicant wishes to make  
of record each of the documents listed on the accompanying  
form PTO/SB/08. It is respectfully requested that the examiner  
initials the cited reference on the form and that it be made  
30 of record in the application and that a copy of the initialed  
form be sent to the applicant with the next communication from  
the examiner.

35 Since the IDS is filed before the mailing date of a first  
Office action on the merits, consideration of the information  
disclosure statement is hereby requested according to

37C.F.R. §1.97(b). The prior art patents contained in the information disclosure statement were cited in communications from the China Intellectual Property Office on Jan. 17, 2003. Applicant sincerely hopes that the examiner can consider the  
5 items contained in the information disclosure statement.

According to the requirement set forth in 37C.F.R. §1.98 and M.P.E.P. 609 (8<sup>th</sup> edition, Aug. 2001), the applicant is submitting copies of the cited reference (China Patent No.  
10 CN1160244A, CN2377611Y, CN1157435A, and Japan Patent No. JP11122294A) and a concise explanation of the relevance in this application hereinafter.

China Patent No. CN1160244A provides a cursor control  
15 device comprising a cursor control unit 1 electrically connected to a computer, a control interface 11 for generating a control signal corresponding to the operation of a user, a controller 12 electrically connected to the control interface 11 for receiving the control signal, and a alerting  
20 device 13 electrically connected to the controller 12 for generating an alerting signal to alert the user. The cursor control device further comprises a detecting device 2 for generating a signal to the controller 12 depending on how long the cursor on the screen has been moved or how long the control  
25 interface 11 has been operated (refer to Fig.1). When the detecting device 2 generates the signal to the controller 12, the controller 12 also generates a corresponding signal to the alerting device 13. The alerting device 13 will generate the alerting signal, which can be an illumination of an LED  
30 23 installed between the user's fingers (refer to Fig.2), to alert the user. Thus, the user will be reminded to take a break after operating the cursor control device for a time.

China Patent No. CN2377611Y provides a pointing device  
35 comprising a housing 14, a wheel 12, a plurality of narrow openings 16 on the wheel 12, a emitter fixed on one side of

the wheel 12 for emitting light through the plurality of narrow openings 16, and a sensor opposite the emitter and fixed on the other side of the wheel 12 for receiving the light emitted from the emitter (refer to Fig.1 to Fig.3, the emitter and sensor are not shown in these figures). The purpose of this invention is to detect the rotation of the wheel 12 without connecting with an optical decoder.

China Patent No. CN1157435A provides a mouse with a button. When a user wants to scroll a window of a computer, all he/she needs to do is depress the button and move the mouse simultaneously. The speed of scrolling depends on how fast the mouse is moved. The purpose of this invention is to solve the problem that the mouse cannot position a cursor accurately as it becomes older and wears out.

Japan Patent No. JP11122294A provides an automatic call receiving display system for electronic mail (e-mail). The system comprises a computer 2a connected to a provider 3 via Internet 1 (2b and 2c in Fig.1 also represent personal computers) and a receiving box 5a connected to the computer 2a (5b and 5c in Fig.1 also represent receiving boxes). The receiving box 5a comprises a liquid crystal display panel 6, an operating portion 7, a display lamp 8, a number display device 10, a memory card socket 11 that can receive a memory card, a CPU 13, and a detector 20 (refer to Fig.2 and Fig.3). The display lamp 8 is switched on if a corresponding e-mail to the computer 2a is received by the receiving box 5a. And, the memory card stores the e-mail received. Even if the computer 2a is not connected to the provider 3, electronic mail can be received and stored via the receiving box 5a.

According to the present invention, what is claimed is:

1. A pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the

computer, **the pointing device** comprising:

a housing;

a pointing unit installed inside the housing for generating pointing signals to control movements of the cursor;

5 a rollable device for generating rolling signals;

**a light source for illuminating the rollable device;** and

a control unit for controlling the pointing device;

wherein when the computer transmits a state signal to the pointing device, the control unit controls the light source

10 to determine an illumination mode of the rollable device according to the state signal.

Compared with CN1160244A, CN2377611Y, CN1157435A, and JP11122294A individually, the present invention provides a pointing device 10 comprising a housing 12, a pointing unit 14 installed inside the housing 12 for generating pointing signals to control movements of a cursor 42, a rollable device 16 for generating rolling signals, **a light source 22 for illuminating the rollable device 16,** and a control unit 24 for controlling the pointing device 10 (refer to Fig.1 to Fig.3). When a driver 32 detects a current computer state, for example that the computer 30 receives an e-mail from the Internet, it will send a corresponding state signal to the pointing device 10 to make the control unit 24 control the light source 22 to emit light or flash light according to the state signal (specification, paragraph [0024]). Because **the rollable device 16 is a rolling wheel made of a transparent material** (specification, paragraph [0018], lines 2 to 3), **the rollable device 16 will present a predetermined illumination mode when it reflects light from the light source 22 (refer to Fig.3 to Fig.6).** Therefore, a user can learn the current computer state from the predetermined illumination mode

realized with the rollable device 16.

Because none of the prior art patents disclose **a pointing device with a light source for illuminating a rollable device**,  
5 it is therefore maintained that claim 1 of the present invention is substantially different from the teachings disclosed in CN1160244A, CN2377611Y, CN1157435A, and JP11122294A.

10 According to the present invention, what is claimed is:

23. A pointing device adapted to electrically connect to a computer for controlling movements of a cursor on a display device of the computer, **the pointing device** comprising:  
15 a housing;  
a pointing unit installed inside the housing for generating pointing signals adapted to control movements of the cursor;  
a rolling wheel for generating rolling signals; and  
20 **a light source for providing light to illuminate the rolling wheel.**

Claim 23 is similar to claim 1 and also comprises the identical limitation of **a pointing device with a light source**  
25 **for illuminating a rollable device**. Because none of the prior art patents disclose **a pointing device with a light source for illuminating a rollable device**, it is therefore maintained that claim 23 of the present invention is substantially different from the teachings disclosed in CN1160244A,  
30 CN2377611Y, CN1157435A, and JP11122294A.

Since the prior art patents CN1160244A, CN2377611Y, CN1157435A, and JP11122294A are substantially different from claim 1 and claim 23 of the present application, and all other  
35 claims are dependent on claim 1 and claim 23, a quick allowance

of the present application is sincerely requested.

5

Respectfully Submitted,

Winston Hsu

Date:

4/17/2007

Winston Hsu, Patent Agent No. 41,526

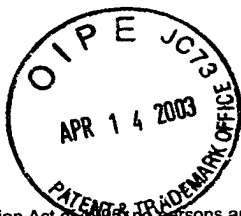
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P.O. BOX 506

Merrifield, VA 22116

U.S.A.

e-mail : winstonhsu@naipo.com.tw



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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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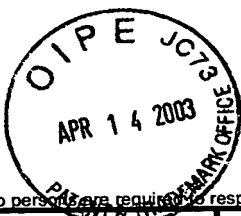
<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	09/681,855	
	<b>Filing Date</b>	06/19/2001	
	<b>First Named Inventor</b>	Ding Jong Wang	
	<b>Group Art Unit</b>	2673	
	<b>Examiner Name</b>		
<b>Total Number of Pages in This Submission</b>	46	<b>Attorney Docket Number</b>	PMXP0107USA

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
<b>RECEIVED</b> APR 15 2003 Technology Center 2600		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	WINSTON HSU
Signature	<i>Winston Hsu</i>
Date	4/11/2003

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# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 0.00

**Complete if Known**

Application Number	09/681,855
Filing Date	06/19/2001
First Named Inventor	Ding Jong Wang
Examiner Name	
Art Unit	2673
Attorney Docket No.	PMXP0107USA

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**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

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Deposit Account Name North America International Patent Office

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ ) 0.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ ) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 0.00

**SUBMITTED BY**

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature	<i>Winston Hsu</i>	Date	4/11/2003		

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